

In re Patent Application of:  
**Boulanger ET AL.**  
Serial No. 09/856,710  
Filed: **February 26, 2002**

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REMARKS

Claims 1 to 40 are currently pending. Claims 1 to 40 have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Moreover, claims 1-4, 6, 12-14, 17-27, 29, 30, and 34-39 have been rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 5,290,485 (Gotoh et al), alone or in view of United States Patent No. 5,130,996 (Amano et al).

Initially, Applicant wishes to point out that the Preliminary Amendment filed by Applicant's previous agent on May 25, 2001 included several unintentional errors and omissions. In particular, all of the claims after claim 5 were erroneously numbered, i.e. one less than the originally filed number. Furthermore, several original claims were simply omitted, i.e. original claims 6, 10, 12, 29. This mis-numbering led to the duplication of original claims 9 and 11, and the complete omission of claim 28 (original claim 29), as observed by the Examiner. Applicant wishes to remedy the aforementioned errors and omissions by reverting back to the original numbering of claims, as hereinabove provided. Accordingly, all of the multiple dependencies have been eliminated, as initially intended.

The wording of Claim 1 has been clarified by the elimination of the pronoun "it" and the alternatively recited limitations, as objected to by the Examiner. The claim now clearly defines a device including a non-linear crystal rotatable about an axis of revolution to tune the emerging frequency, and having curved input and output faces, whereby the incident light always enters the crystal normal to the

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input face. These features are both novel and non-obvious. The cited reference fails to disclose a non-linear crystal pivotable for tuning the wavelength of the emerging light with a curved input surface to ensure that the incident light is always normal to the crystal. In the referenced example 3(d) from the cited reference, the light enters and exits the crystal through the flat end faces 32 and 34.

Claims 2, 16 (mis-numbered claim 15), 19 (mis-numbered claim 18) and 39 (mis-numbered claim 38) have been amended to correctly insert the term "and" instead of "or".

The chemical formulae have been corrected in Claim 5. The symbol D is a commonly used symbol for the term Deuterium or "heavy hydrogen".

Original claims 7, 31 and 32 (mis-numbered claims 6, 30 and 31) have been amended to replace the phrase "the concavity oriented on the opposite side of said crystal" with "a convex surface facing the crystal".

The term "it" has been removed from claims 35, and 37 to 40 (mis-numbered claims 34 and 36 to 39, respectively).

In the description, formulae 2, 4, 5 to 11, and 20 have been correctly identified by amendment.

The title of the application has been amended to the more appropriate "A Tunable Frequency-Converting Optical Device".

Original Figure 2 has been split up into Figures 2a to 2g, as requested by the Examiner. The description, on pages 21 and 29, has been amended to correctly reference the new figures.

Priority is claimed from the French Application 97/14947 based on the material that was originally disclosed in that application, and not from any new material added subsequent. Specific embodiments disclosed in Figures 10 to 13 may not be

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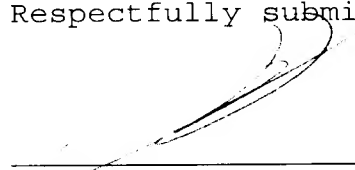
covered by the priority claim unless otherwise disclosed in the Parent application.

As such, it is respectfully submitted that all of the claims remaining in the application are in condition for allowance. Early and favorable consideration would be appreciated.

Should any minor informalities need to be addressed, the Examiner is encouraged to contact the undersigned attorney at the telephone number listed below.

Please charge any shortage in fees due in connection with the filing of this paper, including Extension of Time fees, to Deposit Account No. 50-1465 and please credit any excess fees to such deposit account.

Respectfully submitted,

  
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CHARLES E. WANDS

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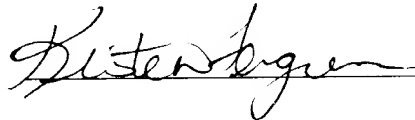
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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Non-Fee Amendment, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450, on this 8 day of September, 2003.

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